Freeform Search

Database: US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term: (vector same (vertex or vertices or vertexes) same polygon same (child or hierarchy or hierarchical)) and mesh

Display: 20 **Documents in Display Format:** - **Starting with Number** 1

Generate: ○ **Hit List** ◉ **Hit Count** ○ **Side by Side** ○ **Image**

Search Clear Interrupt

Search History

DATE: Friday, December 17, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT; PLUR=YES; OP=OR			
L2	(vector same (vertex or vertices or vertexes) same polygon same (child or hierarchy or hierarchical)) and mesh	3	L2
L1	(vector same (vertex or vertices or vertexes) same polygon) and mesh	199	L1

END OF SEARCH HISTORY

Published before April 1999
Terms used
vector PARAGRAPH vertex OR **vertices** OR **vertexes PARAGRAPH polygon** AND **mesh**

Found **18** of **94,329**

Sort results by: relevance
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Results 1 - 18 of 18

Relevance scale

1 The visibility skeleton: a powerful and efficient multi-purpose global visibility tool
Frédo Durand, George Drettakis, Claude Puech
August 1997 **Proceedings of the 24th annual conference on Computer graphics and interactive techniques**
Full text available: pdf(444.91 KB) Additional Information: full citation, references, citings

Keywords: aspect graph, discontinuity meshing, extremal stabbing lines, form factor calculation, global illumination, global visibility, view calculation, visibility

2 MAPS: multiresolution adaptive parameterization of surfaces
Aaron W. F. Lee, Wim Sweldens, Peter Schröder, Lawrence Cowsar, David Dobkin
July 1998 **Proceedings of the 25th annual conference on Computer graphics and interactive techniques**
Full text available: pdf(5.40 MB) Additional Information: full citation, references, citings, index terms

Keywords: loop scheme, mesh simplification, meshes, multiresolution, remeshing, subdivision surfaces, surface parameterization, texture mapping

3 An aspect ratio bound for triangulating a d-grid cut by a hyperplane (extended abstract)
Scott A. Mitchell, Stephen A. Vavasis
May 1996 **Proceedings of the twelfth annual symposium on Computational geometry**
Full text available: pdf(889.75 KB) Additional Information: full citation, references, citings, index terms

4 Interval methods for multi-point collisions between time-dependent curved surfaces
John M. Snyder, Adam R. Woodbury, Kurt Fleischer, Bena Currin, Alan H. Barr
September 1993 **Proceedings of the 20th annual conference on Computer graphics and interactive techniques**
Full text available: pdf(422.51 KB) Additional Information: full citation, references, citings, index terms

Keywords: inclusion function, interval Newton method, interval linear equation

5 Dimension-independent modeling with simplicial complexes

A. Paoluzzi, F. Bernardini, C. Cattani, V. Ferrucci

January 1993 **ACM Transactions on Graphics (TOG)**, Volume 12 Issue 1

Full text available: pdf(4.91 MB) Additional Information: full citation, references, citings, index terms, review

Keywords: n-dimensional triangulation, Boolean operations, design languages, extrusion, polyhedra, representation, simplicial complexes, simplicial maps

6 Visibility-ordering meshed polyhedra

Peter L. Williams

April 1992 **ACM Transactions on Graphics (TOG)**, Volume 11 Issue 2

Full text available: pdf(1.83 MB) Additional Information: full citation, abstract, references, citings, index terms, review

A visibility-ordering of a set of objects from some viewpoint is an ordering such that if object a obstructs object b, then b precedes a in the ordering. An algorithm is presented that generates a visibility-ordering of an acyclic convex set of meshed convex polyhedra. This algorithm takes time linear in the size of the mesh. Modifications to this algorithm and/or preprocessing techniques are described that permit nonconvex ...

Keywords: Delaunay triangulation, depth ordering, finite element methods, mesh generation, point location, scattered data, scientific visualization, triangulation, visibility ordering, volume rendering, volume visualization

7 Technical reports

SIGACT News Staff

January 1980 **ACM SIGACT News**, Volume 12 Issue 1

Full text available: pdf(5.28 MB) Additional Information: full citation

8 Polygon-assisted JPEG and MPEG compression of synthetic images

Marc Levoy

September 1995 **Proceedings of the 22nd annual conference on Computer graphics and interactive techniques**

Full text available: pdf(2.14 MB) ps(77.36 KB) Additional Information: full citation, references, citings, index terms

Keywords: JPEG, MPEG, client-server graphics, polygon-assisted compression

9 An interactive computer graphics approach to surface representation

Sheng-Chuan Wu, John F. Abel, Donald P. Greenberg

October 1977 **Communications of the ACM**, Volume 20 Issue 10

Full text available: pdf(1.27 MB) Additional Information: full citation, abstract, references, citings

An interactive computer graphics method has been developed for the rapid generation of arbitrary shaped three-dimensional surfaces. The method is a synthesis of spline theory and algorithms, an interactive means for man-machine communication, and software for static or dynamic graphics display. The basic technique employed is a modified lofting method in which sectional curves are represented by uniform B-splines and the surface is interpolated between sections by Cardinal splines. Among th ...

Keywords: computer graphics, finite element input methods, lofting, splines, three-dimensional surface representation

10 A multiresolution framework for variational subdivision

Leif Kobbelt, Peter Schröder

October 1998 **ACM Transactions on Graphics (TOG)**, Volume 17 Issue 4

Full text available: pdf(203.59 KB) Additional Information: full citation, abstract, references, citings, index terms

Subdivision is a powerful paradigm for the generaton of curves and surfaces. It is easy to implement, computationally efficient, and useful in a variety of applications because of its intimate connection with multiresolution analysis. An important task in computer graphics and geometric modeling is the construction of curves that interpolate a griven set of points and minimize a fairness functional (variational design). In the context of subdivision, fairing leads to special schemes requiri ...

Keywords: lifting scheme, subdivision, variational modeling, wavelets

11 Direct construction of polynomial surfaces from dense range images through region growing

Nickolas S. Sapidis, Paul J. Besl

April 1995 **ACM Transactions on Graphics (TOG)**, Volume 14 Issue 2

Full text available: pdf(7.89 MB) Additional Information: full citation, references, citings, index terms

12 A Delaunay based numerical method for three dimensions: generation, formulation, and partition

Gary L. Miller, Dafna Talmor, Shang-Hua Teng, Noel Walkington

May 1995 **Proceedings of the twenty-seventh annual ACM symposium on Theory of computing**

Full text available: pdf(1.19 MB) Additional Information: full citation, references, citings, index terms

13 Domain Delaunay Tetrahedrization of arbitrarily shaped curved polyhedra defined in a solid modeling system

Nickolas S. Sapidis, Renato Perucchio

May 1991 **Proceedings of the first ACM symposium on Solid modeling foundations and CAD/CAM applications**

Full text available: pdf(1.35 MB) Additional Information: full citation, references, citings, index terms

14 An approach to 3D pose determination

Norberto Ezquerra, Rakesh Mullick
April 1996 **ACM Transactions on Graphics (TOG)**, Volume 15 Issue 2

Full text available: pdf(5.58 MB) Additional Information: full citation, abstract, references, index terms, review

The orientation, or pose, of an object is a fundamental property that helps to define the geometrical relationship between the object and its environment. In addition, knowledge of object orientation can also facilitate interpretive and decision-making tasks in a variety of practical domains, including industrial, meteorological, and medical applications. Determining object pose, however, remains an open research question in the fields of graphics and visualization. This article describes a ...

Keywords: axis of orientation, geometry, orientation determination, pose determination

15 Model-based recognition of arbitrary surfaces from range data

Jeffrey A. Bloom, Chang Y. Choo, William I. Kwak
June 1990 **Proceedings of the third international conference on Industrial and engineering applications of artificial intelligence and expert systems - Volume 1**

Full text available: pdf(696.20 KB) Additional Information: full citation, abstract, references, index terms

Recognition of arbitrary surfaces is a difficult and largely unsolved problem in computer vision. In this paper, we present a technique to develop a piecewise planar, triangular patch model of an object surface from its range data, and a recognition technique to be used with this model. A large set of object surface data points are segmented into triangular patches using a small number of knot points. The recognition technique extracts and stores in the form of attributed connection graph t ...

16 Constrained 3D navigation with 2D controllers

Andrew J. Hanson, Eric A. Wernert
October 1997 **Proceedings of the 8th conference on Visualization '97**

Full text available: pdf(1.08 MB) Publisher Site Additional Information: full citation, references, citings, index terms

Keywords: camera control, constrained navigation, navigation, viewing control

17 Feature-based volume metamorphosis

Apostolos Lerios, Chase D. Garfinkle, Marc Levoy
September 1995 **Proceedings of the 22nd annual conference on Computer graphics and interactive techniques**

Full text available: pdf(313.03 KB) Additional Information: full citation, references, citings, index terms

Keywords: blending, computer animation, rendering, sculpting, shape interpolation, transformation, volume morphing, warping

18 Procedural texture mapping on FPGAs

Andy G. Ye, David M. Lewis
February 1999 **Proceedings of the 1999 ACM/SIGDA seventh international symposium on Field programmable gate arrays**

Full text available: pdf(1.05 MB) Additional Information: full citation, references, index terms

Results 1 - 18 of 18

```
Connecting via Winsock to Dialog


Logging in to Dialog

Trying 31060000009998...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ********
ENTER PASSWORD:
 ********
Welcome to DIALOG

Dialog level 04.20.00D

Last logoff:  02dec04 17:10:05
Logon file001 17dec04 11:33:34
           *** ANNOUNCEMENT ***
                    ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
NEW FILES RELEASED
***Beilstein Abstracts (File 393)
***Beilstein Facts (File 390)
***Beilstein Reactions (File 391)
***F-D-C Gold/Silver Sheet (File 184)
                    ***
UPDATING RESUMED
                    ***
RELOADED
***Toxfile (File 156)

REMOVED
***Textile Technology Digest (File 119)
                    ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
* * *

File   1:ERIC 1966-2004/Jul 21
       (c) format only 2004 The Dialog Corporation

      Set  Items  Description
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Cost is in DialUnits
? b 410
       17dec04 11:33:35 User259941 Session D162.1
            $0.39    0.111 DialUnits File1
     $0.39  Estimated cost File1
     $0.39  Estimated cost this search
     $0.39  Estimated total session cost   0.111 DialUnits

File 410:Chronolog(R) 1981-2004/Nov
       (c) 2004 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
? set hi ;set hi
HILIGHT set on as ''
HILIGHT set on as ''
```

```
? b 2 6 8 34 35 47 62 65 92 94 98 99 103 113 115 144 202 233 239 248 256 275 295
344 345 347 370 371 434 647 674 696
       17dec04 11:37:24 User259941 Session D162.2
            $0.00    0.102 DialUnits File410
     $0.00  Estimated cost File410
     $0.99  TELNET
     $0.99  Estimated cost this search
     $1.38  Estimated total session cost   0.213 DialUnits

SYSTEM:OS  - DIALOG OneSearch
  File   2:INSPEC 1969-2004/Dec W1
         (c) 2004 Institution of Electrical Engineers
*File   2: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.
  File   6:NTIS 1964-2004/Dec W1
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
  File   8:Ei Compendex(R) 1970-2004/Dec W1
         (c) 2004 Elsevier Eng.  Info. Inc.
  File  34:SciSearch(R) Cited Ref Sci 1990-2004/Dec W2
         (c) 2004 Inst for Sci Info
  File  35:Dissertation Abs Online 1861-2004/Nov
         (c) 2004 ProQuest Info&Learning
  File  47:Gale Group Magazine DB(TM) 1959-2004/Dec 17
         (c) 2004 The Gale group
  File  62:SPIN(R) 1975-2004/Oct W2
         (c) 2004 American Institute of Physics
  File  65:Inside Conferences 1993-2004/Dec W2
         (c) 2004 BLDSC all rts. reserv.
  File  92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
*File 92: This file temporarily not updating.
  File  94:JICST-EPlus 1985-2004/Nov W1
         (c)2004 Japan Science and Tech Corp(JST)
  File  98:General Sci Abs/Full-Text 1984-2004/Sep
         (c) 2004 The HW Wilson Co.
  File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Nov
         (c) 2004 The HW Wilson Co.
  File 103:Energy SciTec 1974-2004/Nov B2
         (c) 2004 Contains copyrighted material
*File 103: For access restrictions see Help Restrict.
  File 113:European R&D Database 1997
         (c)1997 Reed-Elsevier(UK)Ltd All rts reserv
*File 113: This file is closed (no updates)
  File 115:Research Centers & Services 1994-2004/OCT
         (c) 2004 Gale Research Inc.
  File 144:Pascal 1973-2004/Dec W1
         (c) 2004 INIST/CNRS
  File 202:Info. Sci. & Tech. Abs. 1966-2004/Nov 02
         (c) 2004 EBSCO Publishing
  File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
*File 233: File 233 is closed (no longer updating).
  File 239:Mathsci 1940-2004/Jan
         (c) 2004 American Mathematical Society
  File 248:PIRA 1975-2004/Dec W1
         (c) 2004 Pira International
*File 248: See HELP CODES248 for a complete list of
Subject Headings.
  File 256:TecInfoSource 82-2004/Nov
         (c) 2004 Info.Sources Inc
  File 275:Gale Group Computer DB(TM) 1983-2004/Dec 17
         (c) 2004 The Gale Group
  File 295:World Transl.Index 1979-1997/Dec
         (c) 1997 Intl.Translations Ctr.Delft
```

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  File 344:Chinese Patents Abs Aug 1985-2004/May
        (c) 2004 European Patent Office
  File 345:Inpadoc/Fam.& Legal Stat 1968-2004/UD=200450
        (c) 2004 EPO
  File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)
        (c) 2004 JPO & JAPIO
*File 347: JAPIO data problems with year 2000 records are now fixed.
Alerts have been run.  See HELP NEWS 347 for details.
  File 370:Science 1996-1999/Jul W3
        (c) 1999 AAAS
*File 370: This file is closed (no updates). Use File 47 for more current
information.
  File 371:French Patents 1961-2002/BOPI 200209
        (c) 2002 INPI.  All rts. reserv.
*File 371: This file is not currently updating. The last update is 200209.
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
        (c) 1998 Inst for Sci Info
  File 647:CMP  Computer Fulltext 1988-2004/Dec W1
        (c) 2004 CMP Media, LLC
  File 674:Computer News Fulltext 1989-2004/Nov W4
        (c) 2004 IDG Communications
  File 696:DIALOG Telecom. Newsletters 1995-2004/Dec 17
        (c) 2004 The Dialog Corp.

      Set  Items  Description
      ---  -----  -----------
? s (vector(s)(vertex or vertices or vertexes)(s)polygon) and mesh
          789187  VECTOR
          102150  VERTEX
           77129  VERTICES
            2299  VERTEXES
           39845  POLYGON
             157  VECTOR(S)((VERTEX OR VERTICES) OR VERTEXES)(S)POLYGON
          192709  MESH
      S1      13  (VECTOR(S)(VERTEX OR VERTICES OR VERTEXES)(S)POLYGON) AND
                  MESH
? t s1/k/all

 1/K/1     (Item 1 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  ...Abstract:  In  this  paper,  we present a solution to this problem for
surfaces  defined  by  dense  ***polygon***  meshes. Our solution extends Wei
and  Levoy's  (2000)  texture  synthesis  method  by  generalizing  their
definition  of  search  neighborhoods. For each  ***mesh***  ***vertex*** , we
establish  a  local parameterization surrounding the vertex, use this
parameterization  to  create  a  small  rectangular  neighborhood  with the
vertex  at  its  center,  and  search  a  sample  texture for similar
neighborhoods. Our algorithm requires as...

... texture  and a target model. Notably, it does not require specification
of  a  global tangent vector field; it computes one as it goes-either
randomly or via a relaxation process. Despite...
  ...Identifiers:  ***mesh***  vertex


 1/K/2     (Item 2 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Abstract:  We  present  tools for 3D object retrieval in which a model, a
polygonal  mesh , serves as a query and similar objects are retrieved
from a collection of 3D objects...
```

...those derived from normalized models in the search space. Using a metric in the feature **vector** space nearest neighbors are computed and ranked. Objects thus retrieved are displayed for inspection, selection...

... pose estimation we introduce a modified Karhunen-Loeve transform that takes into account not only **vertices** or **polygon** centroids from the 3D models but all points in the polygons of the objects. Some...
...Identifiers: polygonal ***mesh*** ;

1/K/3 (Item 3 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts. reserv.

Abstract: In order to achieve the impression of a smooth surface while rendering a **polygon mesh**, normal **vector** vectors may be provided in the **vertices** of the **mesh** that are the average of the surface normals of the adjacent polygons. Interpolation of these normal vectors while rendering of the polygons in the **mesh**, and using the interpolated normal vectors in the shading computations, yields a smoothly varying intensity...

... visible at silhouettes, showing as straight edges and non-smooth edge junctions at the silhouette ***vertices*** . A remedy for these artefacts is suggested. The remedy consists of subdividing each input ***polygon*** into a ***mesh*** of polygons prior to rendering. The shape of this resulting **polygon mesh** is controlled by the normal vectors that are provided in the **vertices** of the original **polygon**, unlike other subdivision schemes that make use of adjacent polygons. With the method, polygons equipped with **vertex** normal vectors can therefore be processed without further knowledge of neighbour polygons. This makes the ...

... the context of graphics libraries, such as OpenGl, that treat polygons typically on a per- ***polygon*** basis. So the proposed computation of the **mesh** which replaces the original **polygon** can be viewed as a filter which may operate as a process in front of a traditional ***polygon*** rendering pipeline.
...Identifiers: polygon ***mesh*** rendering...

...polygon ***mesh*** shape...

1/K/4 (Item 1 from file: 8)
DIALOG(R)File 8:(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

Abstract: We present tools for 3D object retrieval in which a model, a polygonal **mesh**, serves as a query and similar objects are retrieved from a collection of 3D objects...

...those derived from normalized models in the search space. Using a metric in the feature **vector** space nearest neighbors are computed and ranked. Objects thus retrieved are displayed for inspection, selection...

...pose estimation we introduce a modified Karhunen-Loeve transform that takes into account not only **vertices** or **polygon** centroids from the 3D models but all points in the polygons of the objects. Some...

1/K/5 (Item 2 from file: 8)
DIALOG(R)File 8:(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

...Abstract: In this paper, we present a solution to this problem for

surfaces defined by dense ***polygon*** meshes. Our solution extends Wei and Levoy's texture synthesis method by generalizing their definition of search neighborhoods. For each ***mesh*** ***vertex*** , we establish a local parameterization surrounding the **vertex**, use this parameterization to create a small rectangular neighborhood with the **vertex** at its center, and search a sample texture for similar neighborhoods. Our algorithm requires as...

...texture and a target model. Notably, it does not require specification of a global tangent **vector** field; it computes one as it goes - either randomly or via a relaxation process. Despite...

1/K/6 (Item 3 from file: 8)
DIALOG(R)File 8:(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

Abstract: In order to achieve the impression of a smooth surface while rendering a **polygon mesh**, normal **vector** vectors may be provided in the **vertices** of the **mesh** that are the average of the surface normals of the adjacent polygons. Interpolation of these normal vectors while rendering of the polygons in the **mesh**, and using the interpolated normal vectors in the shading computations, yields a smoothly varying intensity...

...visible at silhouettes, showing as straight edges and non-smooth edge junctions at the silhouette ***vertices*** . In this paper, a remedy for these artefacts is suggested. The remedy consists of subdividing each input ***polygon*** into a ***mesh*** of polygons prior to rendering. The shape of this resulting **polygon mesh** is controlled by the normal vectors that are provided in the **vertices** of the original **polygon**, unlike other subdivision schemes that make use of adjacent polygons. With our method, polygons equipped with ***vertex*** normal vectors can therefore be processed without further knowledge of neighbour polygons. This makes the...

...the context of graphics libraries, such as OpenGl, that treat polygons typically on a per- ***polygon*** basis. So the proposed computation of the **mesh** which replaces the original **polygon** can be viewed as a filter which may operate as a process in front of a traditional ***polygon*** rendering pipeline. (Author abstract) 11 Refs.

1/K/7 (Item 1 from file: 47)
DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.

... a block. One problem: PROJECT doesn't work with all entity types-3-D entities ***mesh*** and extruded surfaces are excluded. As a result, you end up recreating portions of the...command creates the basic AutoCAD 3-D surface entity, an opaque 3- or 4-sided ***polygon*** . REVSURF creates a surface of revolution by swinging a polyline around an axis. TABSURF creates a tabulated surface by sweeping a profile curve along the length of a direction ***vector*** . RULESURF creates a surface between two curves in space and EDGESURF creates a Coons patch...

...the 3DMESH command to create contoured surfaces by defining meshes of points to serve as **vertices** and applying built-in smoothing algorithms to round the rough edges.
The only problem is...

1/K/8 (Item 1 from file: 94)
DIALOG(R)File 94:(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

...ABSTRACT: developed, but they have some problems. Most of them transform the contour map data into **mesh** data, and contains the data of all ***mesh*** polygons. Furthermore each ***mesh*** is divided into two triangles to deal with them as planer polygons. Those kinds of systems need huge area of memory. Another problem is the difficulty in overlapping the **vector** data which represent roads, sites and so on with the ***mesh*** data precisely. To solve those problems, a new landscape simulation system has been developed which...

...generates three dimensional view of the synthesis of these data. Three types of data are **mesh** data which is made from a contour map, **vector** data which represents the elements like roads and sites on the map, and data of...

...buildings, street furniture, and so on. 2. This system does not keep data of all **mesh** polygons, but calculates xyz-coordinates of each **vertex** and the plane equation of a **mesh** unit in case of necessity. So this system can minimize the amount of data of ***mesh*** polygons when the map is divided into a lot of meshes. The system contains the data of only one ***mesh*** ***polygon*** at one time. (author abst.)

1/K/9 (Item 1 from file: 99)
DIALOG(R)File 99:(c) 2004 The HW Wilson Co. All rts. reserv.

...ABSTRACT: closely related to Phong shading are discussed. An algorithm to obtain normal vectors in the **vertices** of a **polygon** **mesh** that are suitable for normal **vector** interpolation is presented. In addition, a modification to normal ***vector*** interpolation, which replaces the traditional linear interpolation by a quadratic interpolation, is proposed. This will allow ***polygon*** models of curved surfaces to be coarser without the risk of inconsistencies between the shape...

1/K/10 (Item 1 from file: 239)
DIALOG(R)File 239:(c) 2004 American Mathematical Society. All rts. reserv.

...of $\Bbb{R}$. Let us denote by $\Omega \sb {h}$ the domain bounded by the **polygon** $\Gamma \sb {0,h}$ with the **vertices** $\{\bold{x}(t\sb {i});\ i=1,2,\dots ,N\}$ and the polygonal boundary $\Gamma...

...such that $h\sb {T}\equiv{\rm diam}(T)\leq Ch$ and such that any **vertex** of a triangle lying on $\Gamma \sb {0,h}$ coincides with some $\bold{x}(t...

...each triangle $T\in \tau \sb {h}$, the authors consider the following 9D space of ***vector*** -fields $\bold{P}(T)$ introduced by C. Bernardi and G. Raugel in 1985 [see, e...normal to the edge $f\sb {i,T}$ of the triangle T opposite to the ***vertex*** $a\sb {i,T}$. The global finite element space for the velocity is given by...

...W\sb {h}$, $\gamma \sb {h}\bold{v}$ is the 1-periodic and piecewise linear **vector** function uniquely defined by the N interpolation conditions: $$ (\gamma \sb {h}\bold{v})(t\sb...

...dots ,N.\tag{14} $$ Thus $\gamma \sb {h}\bold{v}$ may be regarded as a ***vector*** function defined on $\Gamma \sb {0}.$
The third step is the obtaining of a fully...test, the authors report in a first table their test of the influence of the **mesh** parameter h on the error and the behavior of the iterative method (21)--(24). The...

1/K/11 (Item 1 from file: 275)
DIALOG(R)File 275:(c) 2004 The Gale Group. All rts. reserv.

... a block. One problem: PROJECT doesn't work with all entity types-3-D entities ***mesh*** and extruded surfaces are excluded. As a result, you end up recreating portions of the...command creates the basic AutoCAD 3-D surface entity, an opaque 3- or 4-sided ***polygon*** . REVSURF creates a surface of revolution by swinging a polyline around an axis. TABSURF creates a tabulated surface by sweeping a profile curve along the length of a direction ***vector*** . RULESURF creates a surface between two curves in space and EDGESURF creates a Coons patch...

...the 3DMESH command to create contoured surfaces by defining meshes of points to serve as **vertices** and applying built-in smoothing algorithms to round the rough edges.
The only problem is...

1/K/12 (Item 2 from file: 275)
DIALOG(R)File 275:(c) 2004 The Gale Group. All rts. reserv.

... to ten times that of the SRX can be achieved. One higher-level function, quaadrilateral **mesh**, allows the vertices of adajacent quadrilaterals to be transformed, clipped, and lighted a single time...

...poit bus for accelerated transformation, clipping, lighting, and parametric surface calculations. The connection to the ***polygon*** -rendering chip is through a double-buffered RAM containing **polygon** and ***vector*** ***vertex*** addresses, z values, and color data.
Z-Buffer
Once the transform-engine bottleneck was improved...

1/K/13 (Item 3 from file: 275)
DIALOG(R)File 275:(c) 2004 The Gale Group. All rts. reserv.

... to render many polygons with one function call. Because many applications generate surfaces as a **mesh** of polygons that share vertices, these new primitives make it possible for the application program light intensities typical to each **vertex** and attaches them to the ***polygon*** 's definition. To speed this operation, a specialized cosine processor calculates the inner products of two vectors resulting in the eye point and lighting **vector**, as well as the **vertex** normal ***vector*** products. The processor runs at a sustained rate of 60,000 pixels/s per Phong...
?
Connection closed by remote host

```
Connecting via Winsock to Dialog


Logging in to Dialog

Trying 31060000009998...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ********
ENTER PASSWORD:
 ********
Welcome to DIALOG

Dialog level 04.20.00D

Last logoff:  17dec04 12:21:23
Logon file001 17dec04 12:22:16
* * *

File   1:ERIC 1966-2004/Jul 21
       (c) format only 2004 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
? b 410
       17dec04 12:22:16 User259941 Session D163.1
            $0.36    0.104 DialUnits File1
     $0.36  Estimated cost File1
     $0.36  Estimated cost this search
     $0.36  Estimated total session cost   0.104 DialUnits

File 410:Chronolog(R) 1981-2004/Nov
       (c) 2004 The Dialog Corporation

      Set  Items  Description
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? set hi ;set hi
HILIGHT set on as ''
HILIGHT set on as ''
? b 2 6 8 34 35 47 62 65 92 94 98 99 103 113 144 202 233 239 248 256 275 295 344
345 347 370 371 434 647 674 696
       17dec04 12:24:05 User259941 Session D163.2
            $0.00    0.102 DialUnits File410
     $0.00  Estimated cost File410
     $0.50  TELNET
     $0.50  Estimated cost this search
     $0.86  Estimated total session cost   0.206 DialUnits

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